

Summary of October 2002 ACIP Smallpox Vaccination Recommendations (Updated October 21, 2002)

Screening for Atopic Dermatitis as a Contraindication for Vaccination

Atopic dermatitis, irrespective of disease severity or activity, is a risk factor for developing eczema vaccinatum following smallpox vaccination in either vaccinees or in their close contacts. The majority of providers do not routinely make the distinction between eczema and atopic dermatitis, particularly when describing chronic exfoliative skin conditions in infants and young children. Due to the increased risk for eczema vaccinatum, smallpox (vaccinia) vaccine should not be administered to persons with a history of eczema **or** atopic dermatitis, irrespective of disease severity or activity. Additionally, persons with household contacts that have a history of eczema or atopic dermatitis, irrespective of disease severity or activity, are not eligible for smallpox (vaccinia) vaccination because of the increased risk that their household contacts may develop eczema vaccinatum.

Persons with other acute, chronic, or exfoliative conditions (e.g., burns, impetigo, varicella zoster, herpes, severe acne, or psoriasis) are at higher risk for inadvertent inoculation and should not be vaccinated until the condition resolves. The literature also reports that persons with Darier's disease can develop eczema vaccinatum and therefore should not be vaccinated.

To assist providers in identifying persons that should defer smallpox (vaccinia) vaccination, the ACIP offers the following two screening questions: 1) Have you, or a member of your household ever been diagnosed with eczema or atopic dermatitis—if you answered “yes,” you may NOT receive the smallpox (vaccinia) vaccine due to the risk that you or your household contact might develop a severe and potentially life-threatening illness called eczema vaccinatum; and 2) Eczema/atopic dermatitis usually is an itchy red, scaly rash that lasts more than 2 weeks and often comes and goes. If you or a member of your household have **ever** had a rash like this—you should NOT receive the smallpox (vaccinia) vaccine at this time unless you and a healthcare provider are sure that this rash is not atopic dermatitis or eczema. In cases where the dermatological risk factor or diagnosis is uncertain, some organizations, such as the military or CDC, may elect to develop more precise screening tools. These secondary screening tools should weigh the individual's risk of developing an adverse event with the requirement of occupational readiness through safe smallpox vaccination to ensure national security.

Screening for Pregnancy as a Contraindication for Vaccination

Fetal vaccinia is a very rare, but serious, complication of smallpox vaccination during pregnancy or shortly before conception. Therefore, vaccinia vaccine should not be administered in a pre-event setting to pregnant women or to women who are trying to become pregnant. Before vaccination, women of child-bearing age should be asked if

they are pregnant or intend to become pregnant in the next 4 weeks; women who respond positively should not be vaccinated. In addition, the potential risk to the fetus should be explained and women who are vaccinated counseled not to become pregnant during the 4 weeks after vaccination. Routine pregnancy testing of women of child-bearing age is not recommended.

To further reduce the risk of inadvertently vaccinating a woman who is pregnant, at the time of pre-screening, women of child-bearing age should be educated about fetal vaccinia, and abstinence or contraception to reduce the risk of pregnancy before or within four weeks after vaccination. Any woman who thinks she could be pregnant or who wants additional assurance that she is not pregnant should perform a urine pregnancy test with a “first morning” void urine on the day scheduled for vaccination. Such tests could be made available at the pre-screening and vaccination sites to avoid cost or access barriers to testing.

If a pregnant woman is inadvertently vaccinated or if she becomes pregnant within 4 weeks after vaccinia vaccination, she should be counseled regarding the basis of concern for the fetus. However, vaccination during pregnancy should not ordinarily be a reason to terminate pregnancy. To expand understanding of the risk of fetal vaccinia and to document whether adverse pregnancy outcome may be associated with vaccination, a pregnancy registry should be maintained and any adverse outcomes carefully investigated.

Screening for HIV Infection as a Contraindication for Vaccination

Persons with HIV infection or AIDS are at increased risk of progressive vaccinia (vaccinia necrosum) following vaccinia vaccination. Therefore, vaccinia vaccine should not be administered to persons with HIV infection or AIDS. Before vaccination, potential vaccinees should be educated about the risk of severe vaccinia complications among persons with HIV infection or other immunosuppressive conditions; persons who think they may have one of these conditions should not be vaccinated.

The ACIP does not recommend mandatory HIV testing prior to smallpox vaccination, but recommends that HIV testing should be readily available to all persons considering smallpox vaccination. HIV testing is recommended for persons who have any history of a risk factor for HIV infection and who are not sure of their HIV infection status. Because known risk factors cannot be identified for some persons with HIV infection, anyone who is concerned that they could have HIV infection also should be tested. HIV testing should be available in a confidential or, where permitted by law, anonymous setting with results communicated to the potential vaccinee before the planned date of vaccination. Persons with a positive test result should be told not to present to the vaccination site for immunization. Information about local testing options should be provided to all potential vaccinees, including sites where testing is performed at no cost.